



10 YEARS
OF EXCELLENCE

ALLIANCE CONSULTING ENGINEERS, INC.

POST OFFICE BOX 8147
COLUMBIA, SC 29202-8147

PHONE: (803) 779-2078 FAX: (803) 779-2079

www.allianceCE.com

To:	All Bidders and Plan Holders	Project No. 13176-0032
Re:	Addendum No. 2	Provided: E-Mail
Project:	Phase II Infrastructure Improvements at the Chapin Business and Technology Park in Lexington County, South Carolina	
Date:	Friday, January 02, 2015	
Bid Date:	Monday, January 12, 2015 at 2:00 P.M	
Bid No.:	B15029-01/12/15	Page 1 of 1

The following changes are hereby made to the Bid Documents and Specifications for the Phase II Infrastructure Improvements at the Chapin Business and Technology Park in Lexington County, South Carolina.

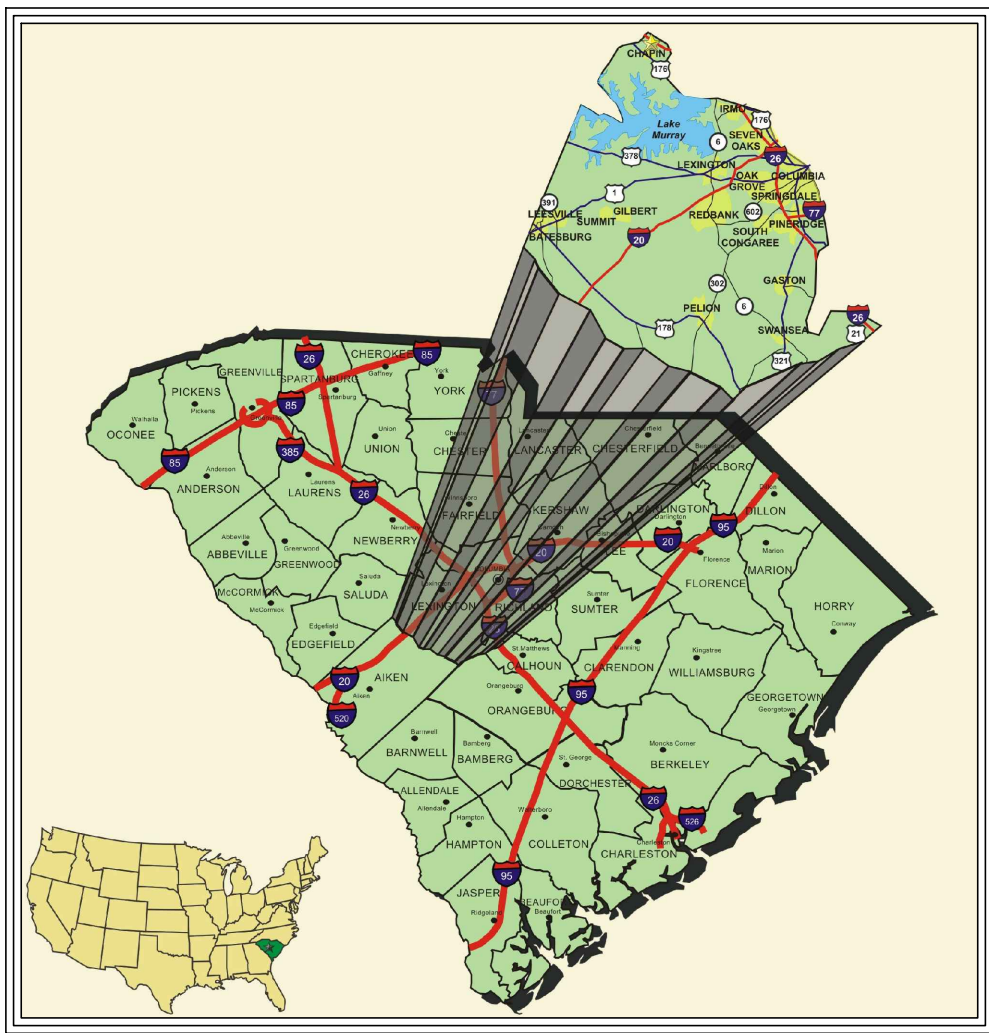
1. **Addition of Base Bid Alternate 4 – Columbia Avenue Improvements.** Construction Plans (ACE DWG. No. 01,892-D16, dated December 2014) to be supplemented to the Construction Drawings and Specifications for the Phase II Infrastructure Improvements at the Chapin Business & Technology Park in Lexington County, South Carolina. The improvements of Columbia Avenue will be included as Alternate 4 as part of the Bid Form (Section 00410).
2. **Extension of Question Period.**
 - A. The Question period has been extended to January 6, 2015, at 4:00 P.M. Questions should be submitted to Mr. Kyle M. Clampitt, P.E. (kclampitt@allianceCE.com) and Ms. Angela Seymour (aseymour@lex-co.com).

Attachments:

- Construction Plans (ACE DWG. No. 01,892-D16, dated December 2014) to include:
 - Cover Sheet
 - C1 - Existing Conditions Plan
 - C2 - Demolition Plan
 - C3 - Grading Plan
 - C4 - Erosion and Sediment Control Plan
 - C5 - Signage and Striping Plan
 - C6 - Roadway Details
 - C7 - Erosion Control Details (Sheet 1 of 2)
 - C8 - Erosion Control Details (Sheet 2 of 2)

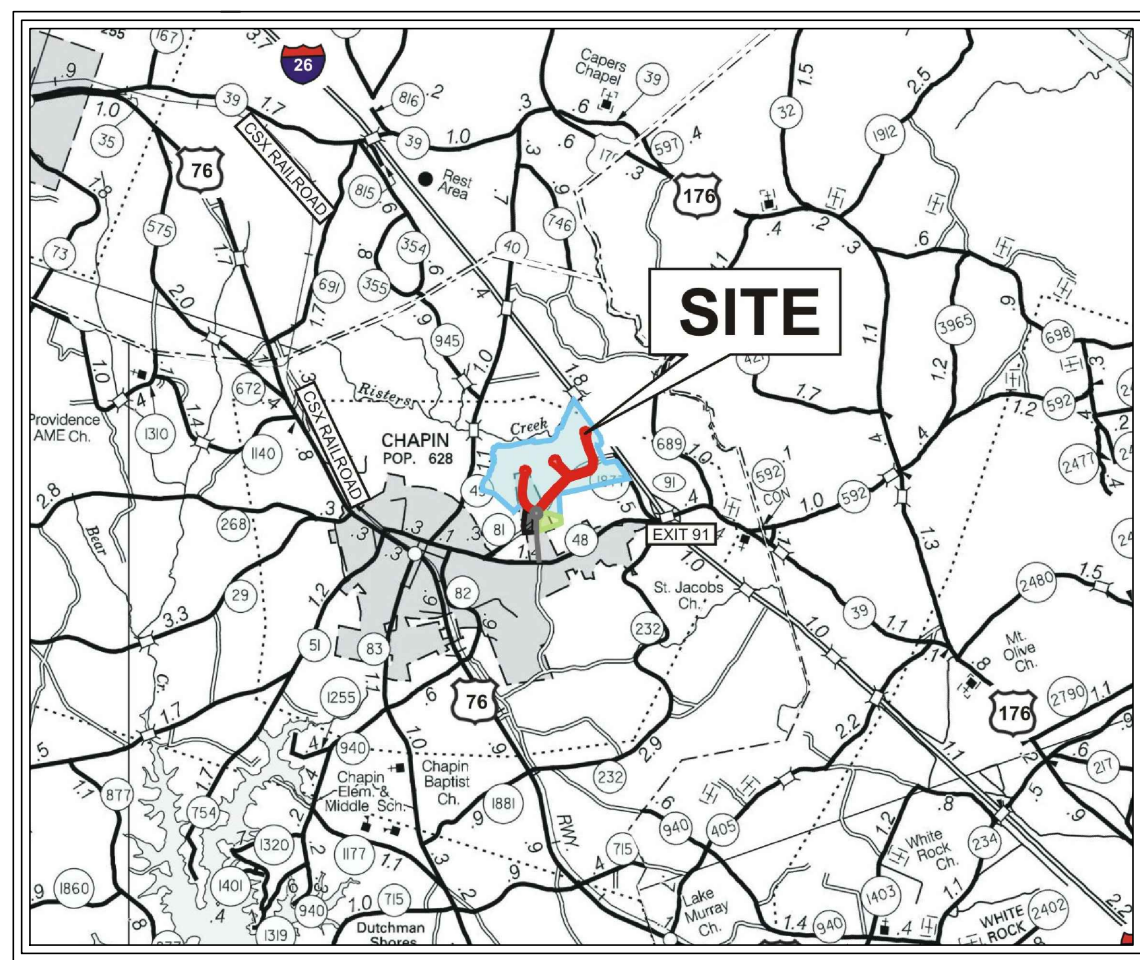
Note: A Revised Bid Form (Section 00410) to be provided in a future addendum to be issued the week of January 5, 2015.

END OF ADDENDUM NO. 2



VICINITY MAP

SCALE: NOT TO SCALE



LOCATION MAP

SCALE: 1" = 1 MILE

UTILITY PROVIDER CONTACTS

ELECTRICAL AND NATURAL GAS PROVIDER:
CONTACT: MS. MORGAN HARRELL, ECONOMIC DEVELOPMENT
AND LOCAL GOVERNMENT REPRESENTATIVE
SCE&G / SCANA CORPORATION
TELEPHONE: (803) 217-5716
FACSIMILE: (803) 933-8036

CONTACT: MR. WILL BRUNSON
SANTEE COOPER
TELEPHONE: (843) 761-8000
FACSIMILE: (843) 347-3802

TELECOMMUNICATIONS PROVIDER:
CONTACT: MR. MARK CLEARY
AT&T SOUTHEAST
TELEPHONE: (803) 401-2325
FACSIMILE: (803) 771-4680

WATER UTILITY PROVIDER:
CONTACT: MR. JASON SHAW, P.E.
CITY OF COLUMBIA
TELEPHONE: (803) 545-3287
FACSIMILE: (803) 988-8199

WASTEWATER UTILITY PROVIDER:
CONTACT: MR. LARRY UMBERGER
TOWN OF CHAPIN
TELEPHONE: (803) 796-9231

LEXINGTON COUNTY COUNCIL MEMBERS

MR. JOHNNY W. JEFFCOAT, CHAIRMAN
MR. M. TODD CULLUM, VICE CHAIRMAN
MR. WILLIAM B. "BILL" BANNING, SR.
MR. KENT COLLINS
MR. BOBBY C. KEISLER
MR. JAMES E. "JIM" KINARD, JR.
MR. BRAD MATTHEWS
MS. DEBRA B. "DEBBIE" SUMMERS
MR. FRANK J. TOWNSEND, III

DEVELOPER INFORMATION

OWNER: LEXINGTON COUNTY
CONTACT: MR. JEFF MCNESBY, COUNTY ENGINEER
ADDRESS: 212 SOUTH LAKE DRIVE
CITY, STATE: LEXINGTON, SOUTH CAROLINA 29072-3437
TELEPHONE: (803) 785-8201
FAX: (803) 785-8593
EMAIL: JMCNESBY@LEX-CO.COM

NPDES PERMIT INFORMATION

NPDES DISTURBED
AREA = 18.1 ACRES

APPROXIMATE LOCATION OF ROADWAY IS:
LONGITUDE 81° 20' 12" E
LATITUDE 34° 10' 32" N

RAILROAD INVOLVEMENT?
YES / NO

APPROVED FOR CONSTRUCTION

DATE JEFF MCNESBY, PE
COUNTY ENGINEER

COLUMBIA AVENUE IMPROVEMENTS FOR THE CHAPIN BUSINESS AND TECHNOLOGY PARK ALTERNATE 4 FOR LEXINGTON COUNTY IN LEXINGTON COUNTY, SOUTH CAROLINA



SHEET INDEX

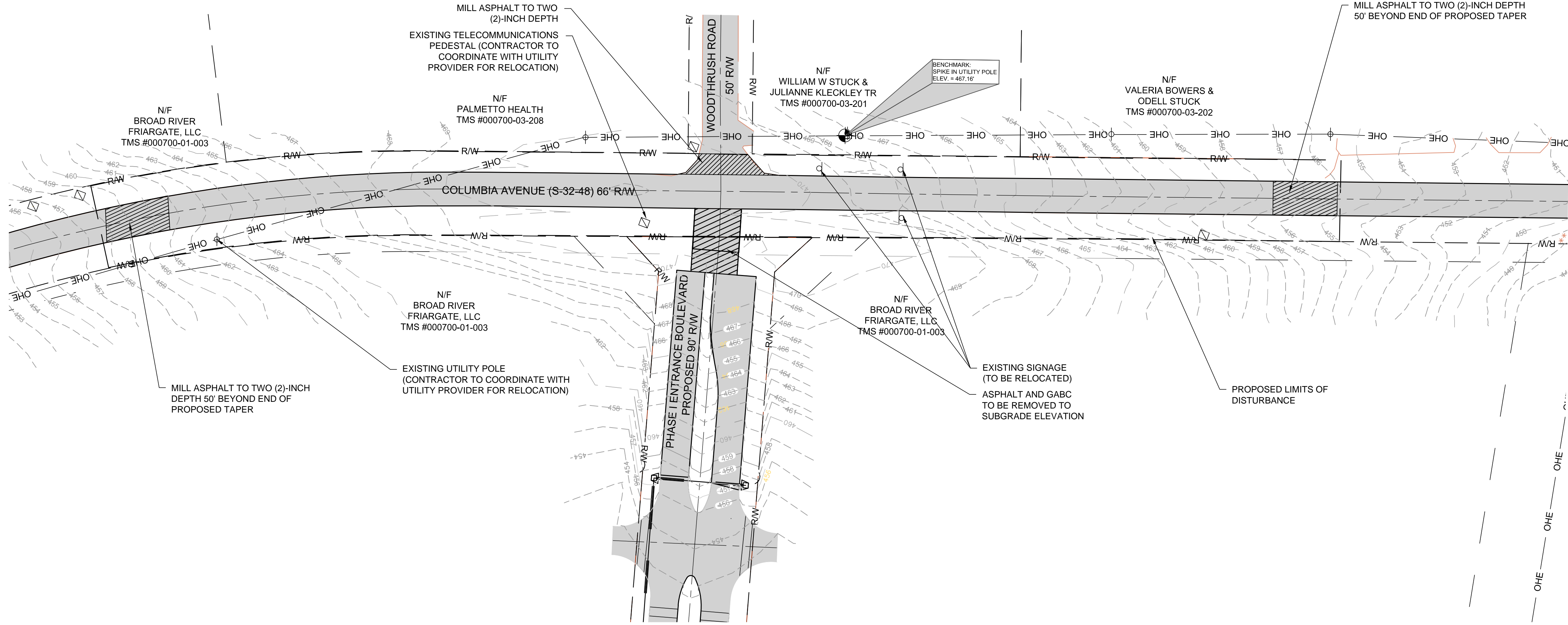
SHEET NO SHEET

C1	EXISTING CONDITIONS PLAN
C2	DEMOLITION PLAN
C3	GRADING PLAN
C4	EROSION AND SEDIMENT CONTROL PLAN
C5	SIGNAGE AND STRIPING PLAN
C6	ROADWAY DETAILS
C7	EROSION CONTROL DETAILS (SHEET 1 OF 2)
C8	EROSION CONTROL DETAILS (SHEET 2 OF 2)

**PRELIMINARY
NOT FOR CONSTRUCTION**

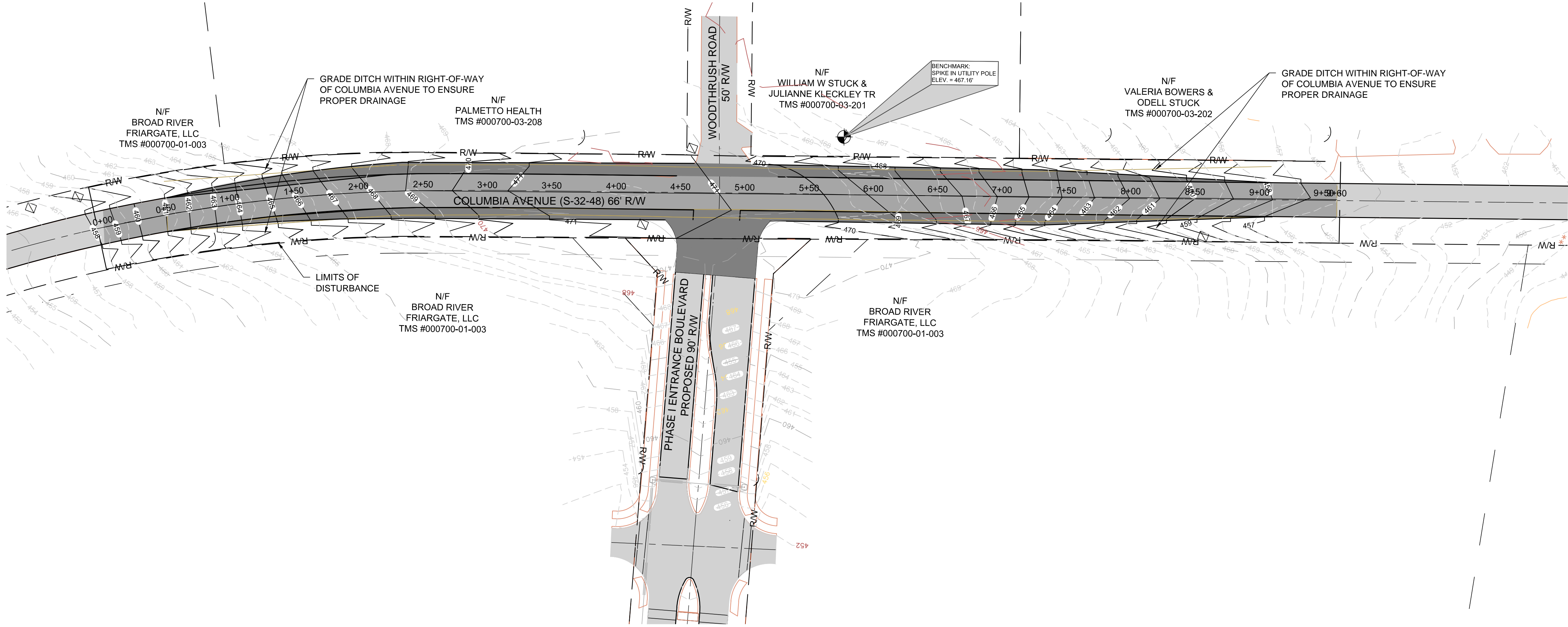
REVISION DATE	
DATE	
SIGNATURE	
ALLIANCE CONSULTING ENGINEERS	
ALLIANCE CONSULTING ENGINEERS, INC. POST OFFICE BOX 8147 COLUMBIA, SOUTH CAROLINA 29202-8147 PHONE (803) 779-2078 FAX (803) 779-2079 WWW.ALLIANCECE.COM	
PROJECT COLUMBIA AVENUE IMPROVEMENTS FOR THE CHAPIN BUSINESS AND TECHNOLOGY PARK ALTERNATE 4 FOR LEXINGTON COUNTY SOUTH CAROLINA	DECEMBER 2014 Project No. 13176-0032 DWG NO. 01,892-D16

January 02, 2015 - 4:15:20 PM S:\Projects\13176-0032 Phase II Infra, Impr., Master Plan, & Site Cert for CBTP in Lexington Cty. SC\dwg\Construction Plans\Columbi C2 - Demolition Plan.dwg



<p>PROJECT</p> <p>COLUMBIA AVENUE IMPROVEMENTS FOR THE CHAPIN BUSINESS AND TECHNOLOGY PARK ALTERNATE 4</p>		<p>FOR</p> <p>LEXINGTON COUNTY SOUTH CAROLINA</p>		<p>DEMOLITION PLAN</p>		<p>SHEET</p>		<p>DATE: DECEMBER 2014</p>		<p>SCALE: 1" = 50'</p>	
<p>FILE NAME: C2.DWG</p>		<p>SHEET</p> <p><u> C2 </u> OF <u> C8 </u></p>		<p>DATE: DECEMBER 2014</p>		<p>SCALE: 1" = 50'</p>					
<p>REFERENCE FILE: BASE.DWG</p>											
<p>PROJECT NO.: 13176-0032</p>											
<p>DWG NO. 01.892-D16</p>											

January 02, 2015 - 4:29:06 PM S:\Projects\13176-0032 Phase II Infra, Impr., Master Plan, & Site Cert for CBTP in Lexington Cty, SC\dwg\Construction Plans\Columbi C3 - Grading Plan.dwg



NOTES:
CAD FILES WILL BE
PROVIDED TO CONTRACTOR
FOR USE WITH SITE STAKING

REFERENCES:

1. REFERENCE IS MADE TO LIDAR TOPOGRAPHICAL DATA PROVIDED BY LEXINGTON COUNTY, SOUTH CAROLINA.
2. REFERENCE IS MADE TO CIVIL ENGINEERING OF COLUMBIA DRAWING PROVIDED ON AUGUST 27, 2013.
3. REFERENCE IS MADE TO SURVEY ONE, LLC BOUNDARY SURVEY DATED APRIL 14, 2014.

DEVELOPER INFORMATION

OWNER:	LEXINGTON COUNTY
CONTACT:	MR. JEFF McNESBY, COUNTY ENGINEER
ADDRESS:	212 SOUTH LAKE DRIVE
CITY, STATE:	LEXINGTON, SOUTH CAROLINA 29072-3437
TELEPHONE:	(803) 785-8153
FAX:	(803) 785-8593
EMAIL:	JMcNESBY@LEX-CO.COM

NOTE: UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE FIELD LOCATED PRIOR TO ANY LAND DISTURBANCE BY THE CONTRACTOR.

NOTE TO CONTRACTOR:


1. BEST MANAGEMENT PRACTICES (BMPs) SHOULD BE IMPLEMENTED PRIOR TO LAND DISTURBANCE ACTIVITIES.
2. ALL WORK TO BE PERFORMED WITHIN RIGHT-OF-WAY OF COLUMBIA AVENUE.

LEGEND

- 350 — EXISTING CONTOUR MAJOR
- 352 — EXISTING CONTOUR MINOR
- RW — EXISTING RIGHT-OF-WAY
- OHE — EXISTING STORM DRAINAGE
- — EXISTING OVERHEAD ELECTRIC LI
- EXISTING UTILITY POLE
- EXISTING TELEPHONE PEDestal
- EXISTING CURB AND GUTTER
- EXISTING PAVEMENT
- LIMITS OF DISTURBANCE
- 400 — PROPOSED CONTOUR MAJOR
- 398 — PROPOSED CONTOUR MINOR
- PROPOSED ASPHALT OVERLAY
- PROPOSED ASPHALT MILLING
- FULL DEPTH DEMOLITION
- PROPOSED FULL DEPTH ASPHALT
- PROPOSED SIGNAGE

#	REVISION	DATE
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APPROVALS		
ENGINEER		
DESIGNER		
ESW		
TECHNICIAN		
BDE/RTO		
CHECKED BY		
KMC/JWF		
APPROVED		
JWF		

	SIGNATURE:	DATE:
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ALLIANCE
CONSULTING ENGINEERS

Alliance Consulting Engineers, Inc.
Post Office Box 8147 • Columbia, South Carolina 29202-8147
Phone (803) 779-2078 • Fax (803) 779-2079

GRADING PLAN

SHEET

COLUMBIA AVENUE
IMPROVEMENTS
FOR THE
CHAPIN BUSINESS AND
TECHNOLOGY PARK
ALTERNATE 4
FOR
LEXINGTON COUNTY

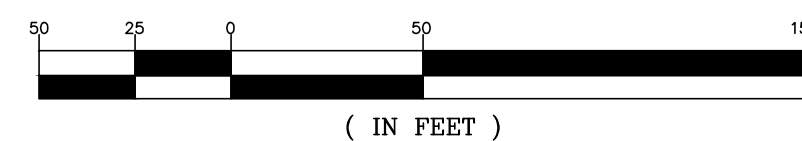
LEXINGTON COUNTY SOUTH CAROLINA DATE: DECEMBER 2014 SCALE: 1" = 50'

FILE NAME:	C3.DWG
REFERENCE FILE:	BASE.DWG
PROJECT NO.	13176-0032

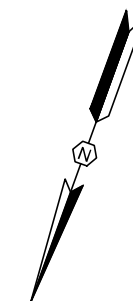
SHEET
C3
OF
C8

DWG NO. 01,892-D16

PRELIMINARY
NOT FOR CONSTRUCTION

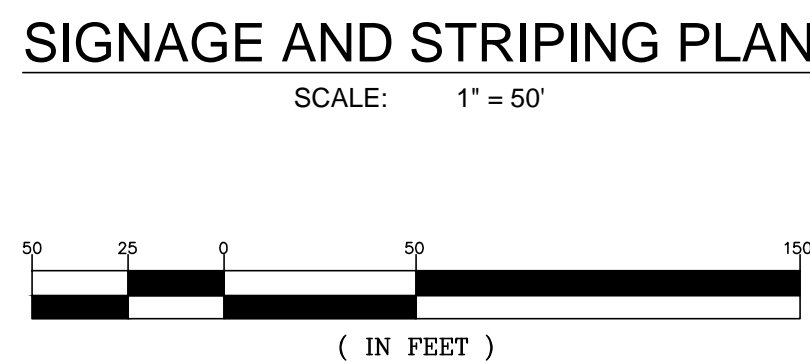


(IN FEET)



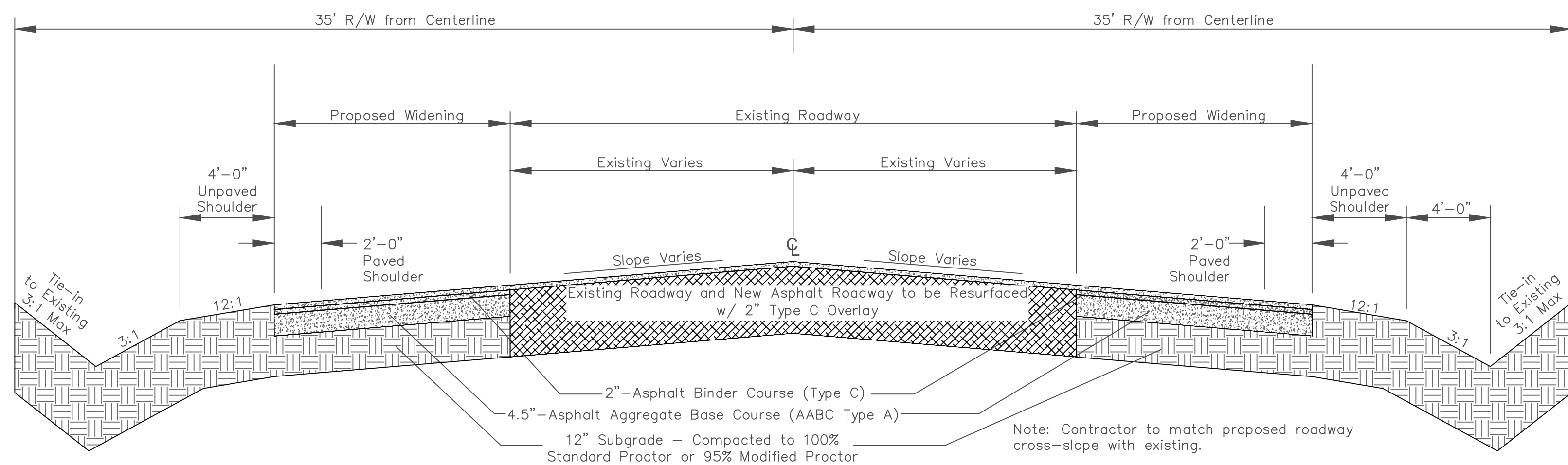
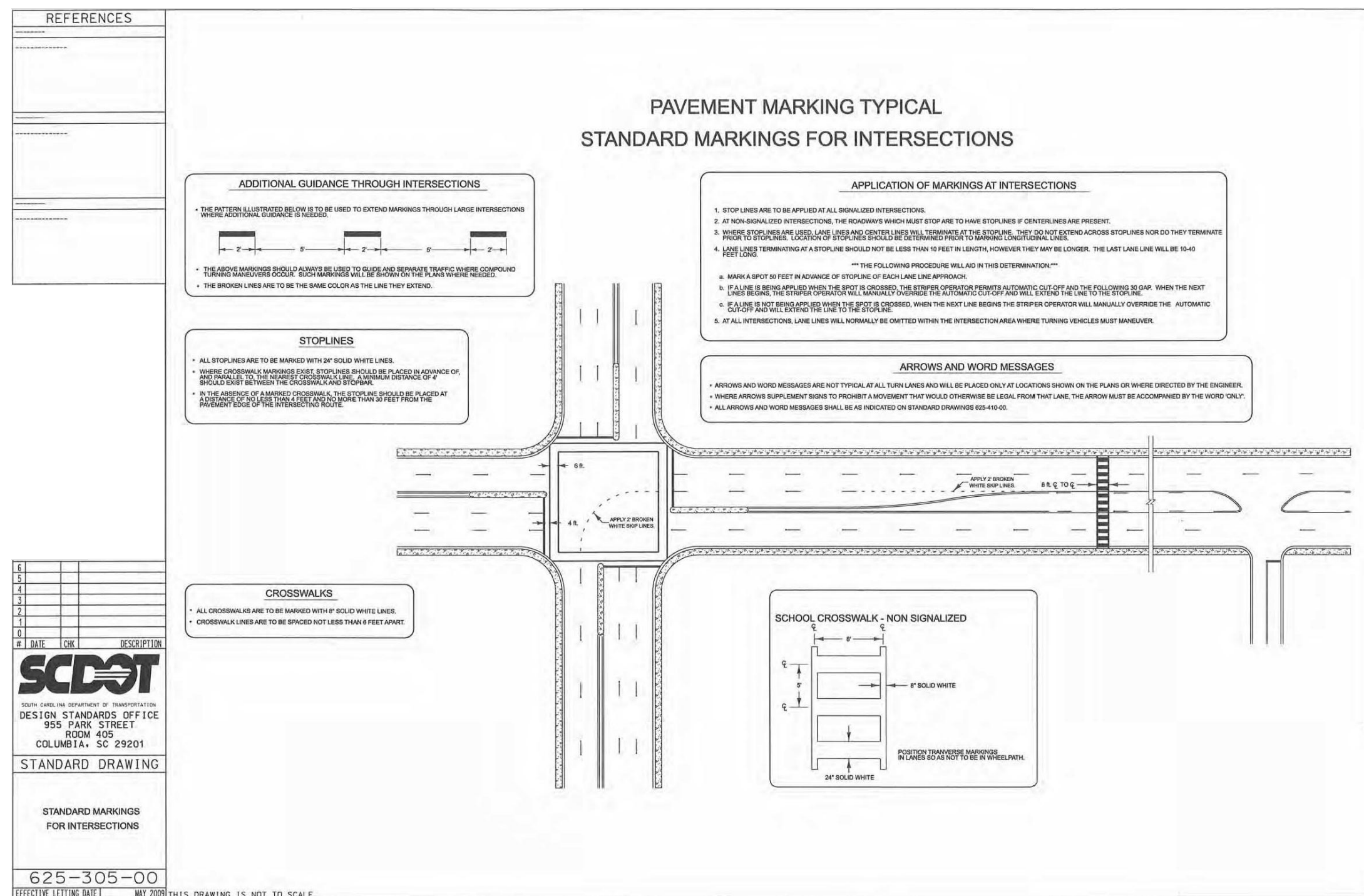
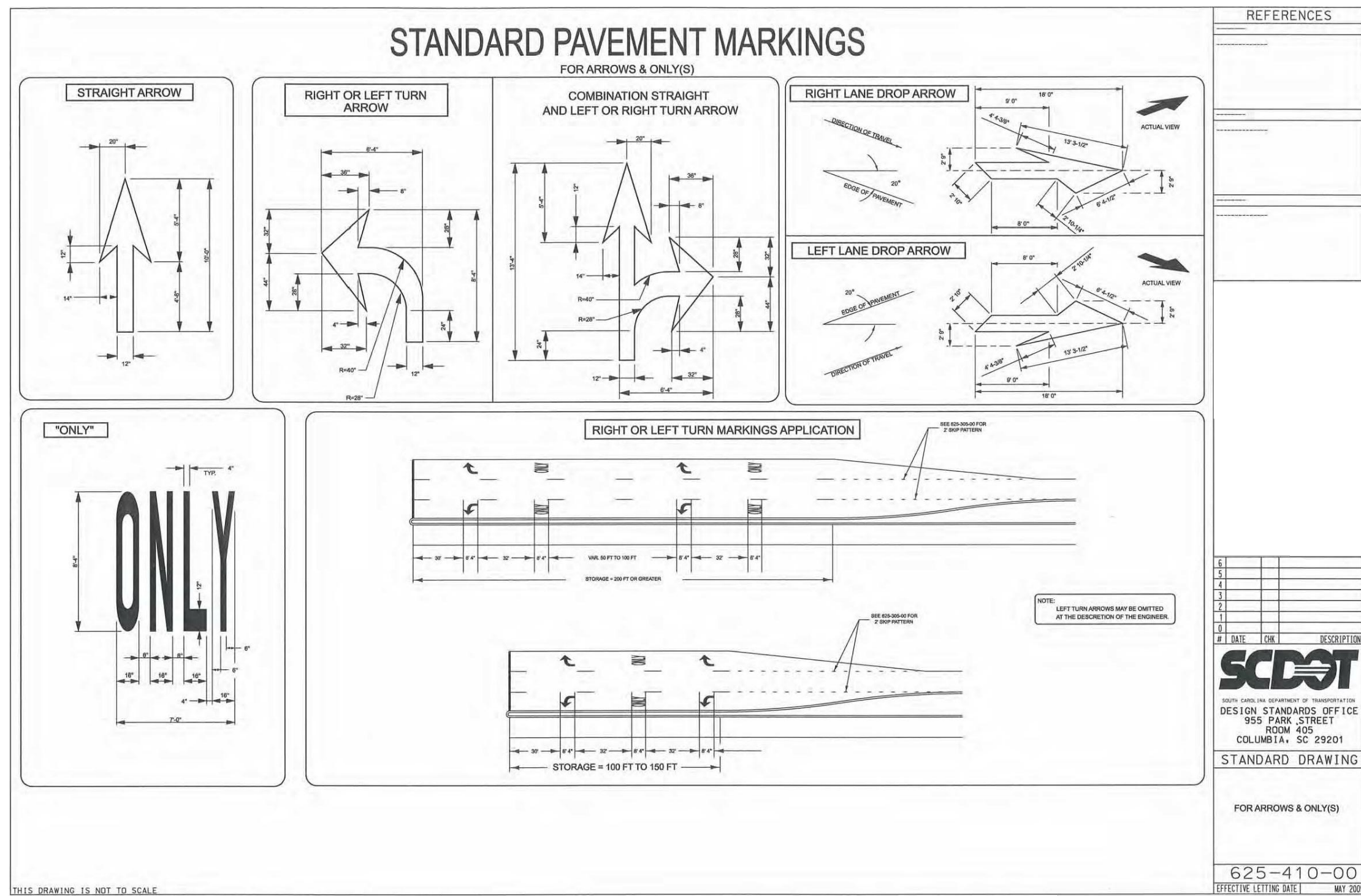
DWG NO. 01,892-D16

PRELIMINARY
NOT FOR CONSTRUCTION



FILE NAME: C5.DWG	SHEET <u> C5 </u>
REFERENCE FILE: BASE.DWG	OF
PROJECT NO. 13176-0032	<u> C8 </u>

PRELIMINARY
NOT FOR CONSTRUCTION



Typical Roadway Widening/Resurfacing Section (Columbia Avenue)

Scale: Not to Scale

NOTES:
CAD FILES WILL BE
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FOR USE WITH SITE STAKING

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APPLICATION OF MARKINGS AT INTERSECTIONS

1. STOP LINES ARE TO BE APPLIED AT ALL SIGNALIZED INTERSECTIONS.
2. AT NON-SIGNALIZED INTERSECTIONS, THE ROADWAYS WHICH MUST STOP ARE TO HAVE STOPLINES IF CENTERLINES ARE PRESENT.
3. WHERE STOP LINES ARE USED, LANE LINES AND CENTER LINES WILL TERMINATE AT THE STOPLINE. THEY DO NOT EXTEND ACROSS STOPLINES NOR DO THEY TERMINATE PRIOR TO STOPLINES. LOCATION OF STOPLINES SHOULD BE DETERMINED PRIOR TO MARKING LONGITUDINAL LINES.
4. LANE LINES TERMINATING AT A STOPLINE SHOULD NOT BE LESS THAN 10 FEET IN LENGTH, HOWEVER THEY MAY BE LONGER. THE LAST LANE LINE WILL BE 10 TO 140 FEET. THE FOLLOWING PROCEDURE WILL AID IN THIS DETERMINATION.
 - a. MARK A SPOT 50 FEET IN ADVANCE OF STOPLINE OF EACH LANE LINE APPROACH.
 - b. IF A LINE IS BEING APPLIED WHEN THE SPOT IS CROSSED, THE STRIPER OPERATOR PERMITS AUTOMATIC CUT-OFF AND THE FOLLOWING 30 GAP. WHEN THE NEXT LANE LINE BEGINS, THE STRIPER OPERATOR WILL MANUALLY OVERRIDE THE AUTOMATIC CUT-OFF AND WILL EXTEND THE LINE TO THE STOPLINE.
 - c. IF A LINE IS NOT BEING APPLIED WHEN THE SPOT IS CROSSED, WHEN THE NEXT LINE BEGINS THE STRIPER OPERATOR WILL MANUALLY OVERRIDE THE AUTOMATIC CUT-OFF AND WILL EXTEND THE LINE TO THE STOPLINE.
5. AT ALL INTERSECTIONS, LANE LINES WILL NORMALLY BE OMITTED WITHIN THE INTERSECTION AREA WHERE TURNING VEHICLES MUST MANUEVER.
6. ALL STRIPING IS TO BE THERMOPLASTIC.

ARROWS AND WORD MESSAGES

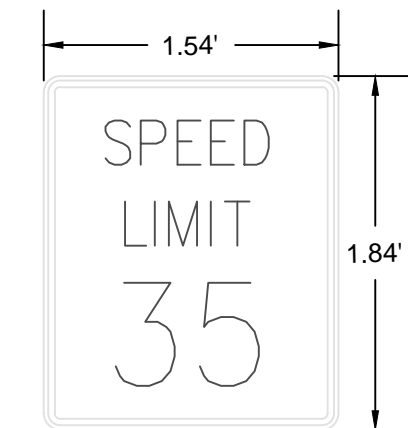
1. ARROWS AND WORD MESSAGES ARE NOT TYPICAL AT ALL TURN LINES AND WILL BE PLACED ONLY AT LOCATIONS SHOWN ON THE CONSTRUCTION DRAWINGS OR WHERE DIRECTED BY THE ENGINEER.
2. WHEN ARROWS SUPPLEMENT SIGNS TO PROHIBIT A MOVEMENT THAT WOULD OTHERWISE BE LEGAL FROM THAT LANE, THE ARROW MUST BE ACCOMPANIED BY THE WORD "ONLY".
3. WHERE STOP LINES ARE USED, LANE LINES AND CENTER LINES WILL TERMINATE AT THE STOP LINE. THEY DO NOT HAVE ALL ARROWS AND WORD MESSAGES SHALL BE AS INDICATED ON THE STANDARD DRAWING NO. S-100.
4. ALL ARROWS AND WORD MESSAGES ARE TO HAVE A THICKNESS OF 1/32 INCH.
5. ALL STRIPING IS TO BE THERMOPLASTIC.

STOPLINES

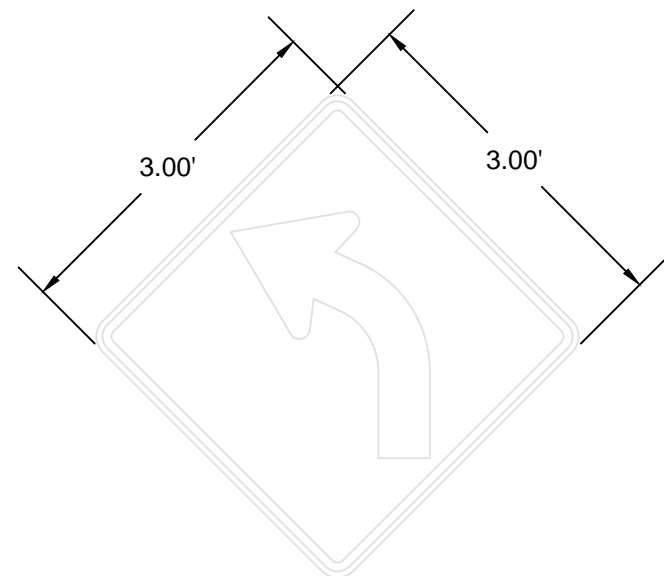
1. ALL STOPLINES ARE TO BE MARKED WITH 24" SOLID WHITE LINES.
2. WHERE CROSSLINK MARKINGS EXIST, STOPLINE SHOULD BE PLACED IN ADVANCE OF AND PARALLEL TO THE NEAREST CROSSLINK LINE. A MINIMUM DISTANCE OF 4' SHOULD EXIST BETWEEN THE CROSSLINK AND STOPBAR.
3. IN THE ABSENCE OF A MARKED CROSSLINK, THE STOPLINE SHOULD BE PLACED AT A DISTANCE OF NO LESS THAN FOUR AND NO MORE THAN 30' FROM THE PAVEMENT EDGE OF THE INTERSECTING ROUTE.
4. STOPLINES ARE TO HAVE A THICKNESS OF 125 MILS.
5. ALL STRIPING IS TO BE THERMOPLASTIC.

APPLICATION OF MARKINGS AT MEDIAN

1. DOUBLE YELLOW LINES ARE TO BE APPLIED ON EACH SIDE OF A PAVED MEDIAN WHERE THE MEDIAN WIDTH (D) IS 3' TO 10', AND THE FULL WIDTH MEDIAN LENGTH (L) IS LESS THAN 200'.
2. SINGLE YELLOW LINES ARE TO BE APPLIED ON EACH SIDE OF A PAVED MEDIAN WHERE THE MEDIAN WIDTH (D) IS LESS THAN 3'.
3. ALL STRIPING IS TO BE THERMOPLASTIC.



SPEED LIMIT SIGN DETAIL



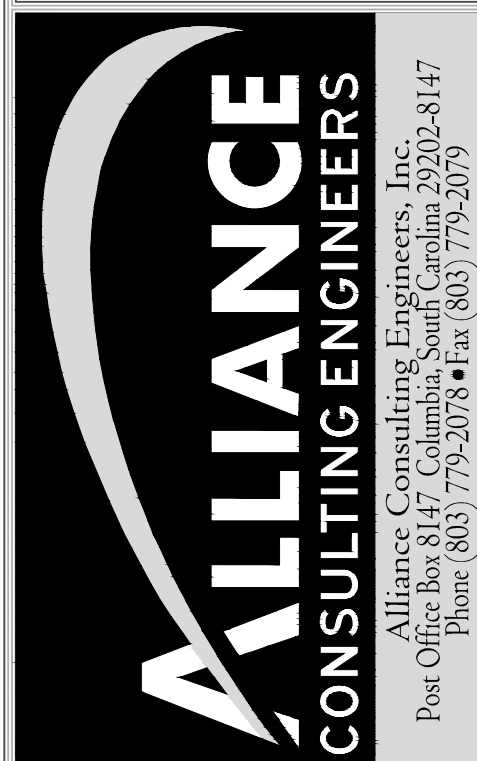
LEFT TURN AHEAD
SIGN DETAIL

ROAD SIGNS

NOT TO SCALE

REVISION DATE	
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APPROVALS	DESIGNER
ENGINEER	DESIGNER
ESW	ESW
TECHNICAL	TECHNICAL
BDE/RTO	BDE/RTO
CHECKED BY	CHECKED BY
KMC/JWF	KMC/JWF
APPROVED	APPROVED
JWF	JWF

SIGNATURE	DATE
-----------	------



SHEET

ROADWAY DETAILS

DATE: DECEMBER 2014 SCALE: NONE

PROJECT COLUMBIA AVENUE
IMPROVEMENTS
FOR THE
CHAPIN BUSINESS AND
TECHNOLOGY PARK
ALTERNATE 4
FOR
LEXINGTON COUNTY
LEXINGTON COUNTY SOUTH CAROLINA

FILE NAME: C6.DWG	SHEET <u>C6</u>
REFERENCE FILE: BASE.DWG	OF
PROJECT NO. 13176-0032	<u>C8</u>

DWG NO. 01,892-D16

PRELIMINARY
NOT FOR CONSTRUCTION

LEXINGTON COUNTY STANDARD NOTES

1. If necessary, slopes which exceed eight (8) vertical feet should be stabilized with synthetic or vegetative mats, in addition to hydroseeding. It may be necessary to install temporary slope drains during construction. Temporary berms may be needed until the slope is brought to grade.

2. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after work has ceased, except as stated below.
 - Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions stabilization measures must be initiated as soon as practicable
 - Where construction activity on a portion of the Site is temporarily ceased, and earth-disturbing activities will be resumed within 14 days, temporary stabilization measures do not have to be initiated on that portion of the Site.

3. All sediment and erosion control devices shall be inspected every seven (7) days. Damaged or ineffective devices shall be repaired or replaced, as necessary.

4. Provide silt fence and/or other control devices, as may be required, to control erosion during utility construction. All disturbed areas shall be cleaned, graded, and stabilized with grassing immediately after the utility installation.

5. All erosion control devices shall be properly maintained during all phases of construction until the completion of all construction activities and all disturbed areas have been stabilized. Additional control devices may be required during construction in order to control erosion and/or offsite sedimentation. All temporary control devices shall be removed once construction is complete and the site is stabilized.

6. The contractor must take necessary action to minimize the tracking of mud onto the paved roadway construction areas. The contractor shall daily remove mud/soil from pavement, as may be required.

7. Residential subdivisions require erosion control features for infrastructure as well as for individual lot construction. Individual property owners shall follow these plans during construction or provide an individual plan meeting section R.72-307 of the stormwater management and sediment reduction act. (Not Applicable for Commercial Sites)

8. Temporary diversion berms and/or ditches will be provided as needed during construction to protect work areas from upslope runoff and/or to divert sediment laden water to appropriate traps or stable outlets.

9. All waters of the State (WoS), including wetlands, are to be flagged or otherwise clearly marked in the field. A double row of silt fence is to be installed in all areas where a 50-foot buffer can't be maintained between the disturbed area and all WoS. A 10-foot buffer should be maintained between the last row of silt fence and all WoS.

Plant Selection

Plant seed selection should be based on the type of soil, the season of the year in which the planting is to be done, and the needs and desires of the permanent land user. Tables 3.14 and 3.15 should be used to select the desired species to be planted. Failure to carefully follow agronomic recommendations often result in an inadequate stand of permanent vegetation that provides little or no erosion control. The rates in Tables 3.14 and 3.15 are based on purity and germination standards required for certification.

The following notes apply to Tables 3.14 and 3.15.

- In mixtures with temporary cover, the full seeding rate of permanent cover shall be used.
- Mix means 2 or more long term species plus short term species. For dates other than optimum, call the Lexington Soil and Water Conservation District, (803) 359-3165 ext. 3.
- A legume, such as a clover, crown vetch, and sericea should be used where it is possible.
- The appropriate inoculants should be used.

Topsail

If the surface soil of the seedbed is not adequate for plant growth, topsail should be applied.

Tillage

If the area has been recently plowed, no tillage is required other than raking or Surface Roughening to break any crust that has formed and to leave a textured surface. If the soil is compacted less than 6-inches, it should be disked for optimal germination. If the soil is compacted more than 6-inches, it should be sub-soiled and disked.

Soil Testing

Information and test provider is available from the PW/SWD and the Soil and Water Conservation District Office.

Lime

Unless a specific soil test indicates otherwise, apply 1x tons of ground coarse textured agricultural limestone per acre (70 pounds per 1000 square feet).

Fertilizer

A minimum of 1000 pounds per acre of a complete 10-10-10 fertilizer (23 pounds per 1000 square feet) or equivalent should be applied during permanent seeding of grasses unless a soil test indicates a different requirement. Fertilizer and lime (if used) should be incorporated into the top 4-6 inches of the soil by disking or other means where conditions allow. Do not mix the lime and the fertilizer prior to the field application.

Seeding

The surface of the soil should be loosened just before broadcasting the seed. Seed should be evenly applied by the most convenient method available for the type of seed to be applied. Typical application methods include but are not limited to cyclone seeders, rotary spreaders, drop spreaders, broadcast spreaders, hand spreaders, cultipacker seeder, and hydro-seeders. Cover applied seed by raking or dragging a chain or brush mat, and then lightly firm the area with a roller or cultipacker. Do not roll seed that is applied with a hydro-seeder and hydro-mulch.

Mulching

All permanent seeded areas should be covered with mulch immediately upon completion of the seeding application to retain soil moisture and reduce erosion during establishment of vegetation. The mulch should be applied evenly in such a manner that it provides a minimum of 75% coverage. Typical mulch applications include straw, wood chips, bark, wood fiber, and compost mulch. The most commonly accepted mulch used in conjunction with permanent seeding is small grain straw. This straw should be dry and free from mold damage and noxious weeds. The straw may need to be anchored with netting or asphalt emulsions to prevent it from being blown or washed away. The straw mulch may be applied by hand or machine at the rate 2 tons per acre (90 pounds per 1000 square feet). Frequent inspections are necessary to check that conditions for growth are good.

Irrigation

Permanent seeded areas should be kept adequately moist, especially late in the specific growing season. Irrigate the seeded area if normal rainfall is not adequate for the germination and growth of seedlings. Water seeded areas at controlled rates that are less than the rate at which the soil can absorb water to prevent runoff. Runoff of irrigation water wastes water and can cause erosion.

Re-seeding

Inspect permanently seeded areas for failure, make necessary repairs and re-seed or overseed within the same growing season if possible. If the grass cover is sparse or patchy, re-evaluate the choice of grass and quantities of lime and fertilizer applied. If the permanent seeding has less than 40% cover, have the soil tested to determine any acidity or nutrient deficiency problems. Final stabilization by permanent seeding of the site requires that it be covered by a 70% coverage rate.


Post-Stabilization

Once areas are stabilized they can be converted to native species or for establishing on non-critical, level sites. Table 3.16 lists some native species of Lexington County that can be used.

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

PERMANENT VEGETATION
NOTES & SCHEDULE
(Sheet 1 of 2)

DRAWING NO: D-11A
DATE: October 2007



SC DHEC STANDARD SEDIMENT AND EROSION CONTROL NOTES

1. IF NECESSARY, SLOPES, WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.

2. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW.

- WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
- WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.

3. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE CALENDAR EVERY WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY, OR INCORRECTLY, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.

4. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE SEDIMENT BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.

5. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.

6. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.

7. RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN IN ACCORDANCE WITH S.C. REG. 72-300 ET SEQ. AND SCR100000.

8. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.

9. ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS.

10. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.

11. A COPY OF THE SWPPP, INSPECTIONS RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.

12. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.

13. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.

14. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.

15. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPS (SEDIMENT BASIN, FILTER BAG, ETC.).

16. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:

- WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL;
- WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS;
- FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND
- SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.

17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.

18. IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPS MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.

19. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE.

ADDITIONAL NOTES:

A. INSTALL PERMANENT VEGETATIVE COVER AND THE LONG-TERM EROSION PROTECTION MEASURES OR STRUCTURES AS SOON AS PRACTICAL IN THE DEVELOPMENT PROCESS.

B. PROVIDE FOR HANDLING THE INCREASED RUNOFF CAUSED BY CHANGED SOIL AND SURFACE CONDITIONS. USE EFFECTIVE MEANS TO CONSERVE EXISTING ON-SITE SOIL INCLUDING THE USE OF DIVERSION DITCHES, GRASSED WATERWAYS AND STORM SEWERS.

C. PLACE SILT FENCE BARRIERS AT LOCATIONS SHOWN ON PLAN. SILT BARRIERS SHALL BE MAINTAINED IN PLACE AND IN GOOD CONDITION UNTIL GROUND COVER IS ESTABLISHED.

D. ALL DISTURBED AREAS NOT PAVED SHALL BE GRASSED. USE TEMPORARY PLANT COVER, MULCHING, AND/OR STRUCTURES TO CONTROL RUNOFF AND PROTECT AREAS SUBJECT TO EROSION DURING CONSTRUCTION.

E. SEDIMENT PONDS ARE TO BE EXCAVATED TO ORIGINAL GRADES UPON THE ACCUMULATION OF 1.5' ON SEDIMENT STAKE PLACED AT OUTLET.

F. PROVIDE A TEMPORARY STONE SPLASH PAD AT ALL FIRE HYDRANTS OR OTHER POINTS IF DISCHARGE DURING TESTING OF THE WATER DISTRIBUTION SYSTEM.

G. SHOULD PERMANENT GRASSING REQUIREMENTS CONFLICT WITH LANDSCAPE PLANS, LANDSCAPE PLANS SUPERCEDE PERMANENT GRASSING REQUIREMENTS.

GRASSING SPECIFICATIONS:

A. ALL SEED MIXTURES FOR THE VARIOUS SEEDING SCHEDULES SHALL BE WEIGHED AND MIXED TO THE PROPER PROPORTIONS IN THE PRESENCE OF THE OWNER OR THE OWNER'S REPRESENTATIVE.

B. DOUBLE SEED ALL GRASSED SWALES, WATERWAYS, AND EMBANKMENTS FROM TOP OF BANK TO BOTTOM OF BANK ON ALL BANK SLOPES LESS THAN 3:1

CONSTRUCTION SEQUENCE

1. RECEIVE LAND DISTURBANCE PERMIT FROM LEXINGTON COUNTY AND NPDES COVERAGE FROM SCDHEC.

2. RECEIVE ENCROACHMENT PERMIT FROM SCDOT.

3. NOTIFY SCDHEC REGIONAL OFFICE AND LEXINGTON COUNTY PUBLIC WORKS 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITIES.

4. INSTALL PERIMETER EROSION AND SEDIMENT CONTROL DEVICES.

5. BEGIN ROUGH GRADING OPERATIONS.

6. COMPLETE ROUGH GRADING OPERATION.

7. TEMPORARY GRASSING AS NECESSARY.

8. INSTALL BASE AND ASPHALT.

9. COMPLETE FINE GRADING OF SHOULDER AREAS.

10. INSTALL PAVEMENT STRIPING AND ROADWAY SIGNAGE AS REQUIRED.

11. INSTALL PERMANENT GRASSING AND STABILIZATION.

12. MAINTAIN ALL EROSION AND SEDIMENT CONTROL DEVICES FOR THE EXTENT OF THE PROJECT.

13. ONCE THE SITE STABILIZES, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES

AFTER ENTIRE AREA DRAINING TO THE STRUCTURE IS FINALLY STABILIZED (SCDHEC RECOMMENDS THAT THE PROJECT OWNER/OPERATOR HAVE THE SWPPP PREPARER (IF APPLICABLE) OR REGISTRATION EQUIVALENT APPROVE THE REMOVAL OF THE TEMPORARY STRUCTURES).

TABLE 3.14 PERMANENT VEGETATION SCHEDULE			
Species	Rate (lbs/acre)	Optimum Dates to Plant	Remarks
Bahia Grass (Alone)	40	March 20 – June 15	Slow to become established
Bahia Grass (Mix)*	30	March 20 – June 15	Slow to become established
Bermuda Grass (Hulled) (Alone)	8–12	April – July 15	Quick cover, Sod farming, partial winter kill
Bermuda Grass (Hulled) (Mix)*	4–6	April – July 15	Quick cover, Sod farming, partial winter kill
Fescue, Tall (KY31) Alone	40	August 15 – October	Seldom seeded alone, not for dry or wet sites
Fescue, Tall (KY31) Mix*	20	August 15 – October	Seldom seeded alone, not for dry or wet sites
Sericea Lespedeza (Scarified) Alone or Mix*, (Inoculate with EL Inoculant)	40	April – June	Good for slopes, cuts, and fills that require low maintenance
Ladino Clover (Mix* only), (Inoculate with AB Inoculant)	2	August 20 – October	Naturally adds nitrogen

* For details on mixes consult the Lexington Soil and Water Conservation District, (803) 359-3165 ext. 3.

TABLE 3.15 PERMANENT VEGETATION SCHEDULE FOR STEEP SLOPES/CUT SLOPES			
Species	Rate (lbs/acre)	Optimum Dates to Plant	Remarks
Weeping Lovegrass (Alone)	4	April – July 20	Quick cover, deep roots, likes dry sites, seldom used alone, clumps
Weeping Lovegrass (Mix)*	2	April – July 20	Quick cover, deep roots, likes dry sites, seldom used alone, clumps

TABLE 3.16 NATIVE SPECIES THAT CAN BE USED ON NON-CRITICAL, LEVEL SITES IN LEXINGTON COUNTY, SC			
Species	Rate (lbs/acre)	Optimum Dates to Plant	Remarks
Switchgrass (Mix* with Legumes)	10, PLS**	February 10 – April 20	Mix with Sericea at 30 lbs/acre
Indian Grass (Mix)*	8, PLS**	February – April 20	Mix with Sericea at 30 lbs/acre
Little Bluestem, (Mix*)	8, PLS**	February 10 – April	

* Pure Live Seed

LEXINGTON COUNTY
PUBLIC WORKS DEPARTMENT

PERMANENT VEGETATION
NOTES & SCHEDULE
(Sheet 2 of 2)

DRAWING NO: D-11A
DATE: October 2007

REVISION
DATE

APPROVALS

ENGINEER
ESW

DESIGNER
ESW

TECHNICIAN
RDI/RTO

CHECKED BY
KMC/JWT

APPROVED
JWT

DATE

SIGNATURE

FILE NAME:
C7.DWG

REFERENCE FILE:
BASE.DWG

PROJECT NO:
13176-0032

SHEET
C7
OF
C8

DWG NO. 01,892-D16

PROJECT

COLUMBIA AVENUE
IMPROVEMENTS
FOR THE
CHAPIN BUSINESS AND
TECHNOLOGY PARK
ALTERNATE 4
FOR
LEXINGTON COUNTY

EROSION CONTROL DETAILS
(SHEET 1 OF 2)

DATE: DECEMBER 2014

SCALE: NONE

LEXINGTON COUNTY
SOUTH CAROLINA

OWNER: LEXINGTON COUNTY

CONTACT: MR. JEFF MANESBY, COUNTY ENGINEER

ADDRESS: 212 SOUTH LAKE DRIVE

CITY, STATE: LEXINGTON, SOUTH CAROLINA 29072-3437

TELEPHONE: (803) 785-8153

FAX: (803) 785-8593

EMAIL: JMcNesby@LEX-CO.COM

NOTE: UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE FIELD LOCATED PRIOR TO ANY LAND DISTURBANCE BY THE CONTRACTOR.

NOTE TO CONTRACTOR:

1. BEST MANAGEMENT PRACTICES (BMPS) SHOULD BE IMPLEMENTED PRIOR TO LAND DISTURBANCE ACTIVITIES.

2. ALL WORK TO BE PERFORMED WITHIN RIGHT-OF-WAY OF COLUMBIA AVENUE.

PRELIMINARY
NOT FOR CONSTRUCTION

